

ENGINEERING & ENVIRONMENTAL SERVICES COMMITTEE

WEDNESDAY, JULY 25, 2012 - 3:30 P.M.

CVRD Boardroom, 175 Ingram Street

		AGENDA	
		AGENDA	<u>Pages</u>
1.	<u>APPR</u>	OVAL OF AGENDA:	1 - 2
2.	ADOP M1	Minutes of the June 27, 2012 meeting of the Engineering & Environmental Services Committee.	3 - 5
3.	BUSIN	NESS ARISING FROM THE MINUTES:	
4.	DELE	GATIONS: no delegations	
5.	CORF	RESPONDENCE no correspondence	
6.	REPO	PRTS	
	R1	Woodley Range Water System - Service Establishment and Loan Authorization Bylaws Dave Leitch, Manager, Water Management	6 - 8
	R2	Dogwood Ridge Capital Works Upgrades/Cowichan Tribes Agreement – Dave Leitch, Manager, Water Management	9 – 10
	R3	1 st Stage Approval for CVRD takeover of the Fairbridge Water System – <i>Dave Leitch, Manager, Water Management</i>	11 – 14
	R4	Bylaw No. 3614 Garbage & Recycling Materials Collection Amendment - Laura Nessman, Environmental Resource Asst.	15 – 19
	R5	Lanes Road Drainage Service Areas Amendment Request Dave Leitch, Manager, Water Management	20 – 23
	R6	Mill Bay Critical Streetlighting Maximum Requisition Limit Brian Dennison, General Manager, E&E	23
	R7	Shellwood Water System Service Establishment and Loan Authorization Bylaws Dave Leitch, Manager, Water Management	24 – 26
	R8	The Cowichan Recyclopedia – The A to Z of Zero Waste Laura Nessman, Environmental Resource Assistant	27
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R10	Carlton Water System, Service Establishment and Loan Authorization Bylaws Dave Leitch, Manager, Water Management	30 – 32
R11	Shawnigan Lake North Water System Conservation Fee Dave Leitch, Manager, Water Management	33 – 34
R12	2012 Community Emission and Inventory Information Kate Miller, Manager, Regional Environmental Policy	35 – 43
R13	Plan2Adapt Website and Tool Kate Miller, Manager, Regional Environmental Policy	44 - 48
R14	Youbou Water System – request for refund of Parcel Taxes Dave Leitch, Manager, Water Management	49 - 53

7. **NEW BUSINESS:**

8. **QUESTION PERIOD:**

9. CLOSED SESSION

Motion that the meeting be closed to the public in accordance with the Community Charter Part 4, Division 3, Section 90, subsection as noted in accordance with each agenda item.

SM1 Closed session minutes of June 27, 2012

SSR1 Land Acquisition (Sub (1) (e))

56 - 58

54 - 55

10. ADJOURNMENT

The next meeting of the Engineering & Environmental Services Committee will be held October 24, 2012.

Distribution:

Director Iannidinardo, Chair

Director Dorey, Vice-Chair

Director Duncan

Director Fraser

Director Giles

Director Warcotte

Director McGonigle

Director Morrison

Director Walker

Director Weaver

Director Lefebure

As Well As:

Director Hutchins, Chair, CVRD
Warren Jones, CAO
Brian Dennison, General Manager, Engineering & Environmental Services
Bob McDonald, Manager, Recycling & Waste Management
Dave Leitch, AScT., Manager, Water Management
Kate Miller, Manager, Regional Environmental Policy

Agenda Cover Only:

Directors Hartmann, Kent, Lines
Norm Olive, P. Eng., Manager, Capital Projects;
Tom Anderson, General Manager, Planning & Development

Mark Kueber, Manager, Corporate Services

PRESENT:

Minutes of the regular meeting of the Engineering & Environmental Services Committee held in the CVRD Boardroom, 175 Ingram Street, Duncan, on June 27, 2012 at 3:30 p.m.

PRESENT:

Director lannidinardo, Chair

Director Dorey, Vice-Chair

Directors, Fraser, Giles, Hutchins, Marcotte, McGonigle, Morrison, Walker, Weaver

ABSENT:

Directors Duncan and Lefebure

ALSO

W. Jones, CAO, CVRD

PRESENT:

D. Leitch, AScT., Manager, Water Management

B. McDonald, Manager, Recycling & Waste Man. J. Adair, Superintendent, Solid Waste Operations E. Doyle-Yamaguchi, Sr. Environmental Analyst H. Huffman, Environmental Technologist III I. Sarady, Environmental Technologist II K. Milward, , Environmental Technologist I

J. Bath, Recording Secretary

APPROVAL OF AGENDA The following item was added under New Business:

NB1 Staff report regarding an increase in maximum requisition limit for the Saltair Water System was added to the agenda.

It was moved and seconded that the agenda be approved as amended.

MOTION CARRIED

ADOPTION OF MINUTES

M1

It was moved and seconded that the minutes of the May 23, 2012 regular Engineering & Environmental Services Committee meeting be adopted.

MOTION CARRIED

M2

It was moved and seconded that the minutes of the June 13, 2012 special Engineering & **Environmental Services** Committee meeting be adopted.

MOTION CARRIED

BUSINESS ARISING OUT No business arising **OF MINUTES**

DELEGATIONS

D1

Mr. Michael Tripp, BFI Canada Inc., presented regarding CVRD takeover of the garbage & recycling collection program, advising that his company would like to work together to improve the program, stating that other municipalities have found it better to leave collection to the private sector. Mr. Tripp noted that his firm could provide a cost effective service with a 7 year contract and automated collection trucks.

REPORTS

R1

A staff report was considered regarding preparation of a Capital Reserve Fund Bylaw for the Lambourn Estates Water System to fund upgrades to water reservoir.

It was moved and seconded that it be recommended to the Board that a Capital Reserve Fund Expenditure Bylaw be prepared for withdrawal of funds not exceeding \$15,000 from the Lambourn Estates Water System Capital Reserve Fund to finance upgrades to the existing water reservoir and water treatment system, and further that the bylaw be forwarded to the Board for consideration of three readings and adoption.

MOTION CARRIED

R₂

A staff report was provided for information regarding development of an agricultural land use inventory and water demand model for the CVRD.

FOR INFORMATION

R3

A staff report was distributed for information providing the status on efforts being made towards the CVRD's zero waste goal. The report provided a list of the close to 600 products now being accepted for recycling at CVRD depots.

Staff were requested to communicate this "good news" story to the public..

FOR INFORMATION

NEW BUSINESS

NB1

A staff report was considered regarding an increase in the maximum annual tax requisition limit for the Saltair Water System.

It was moved and seconded that it be recommended to the Board:

- 1. That the *Certificate of Sufficiency*, confirming that sufficient petitions requesting an increase to the maximum annual tax requisition limit for the Saltair Water System be received; and
- 2. That "CVRD Bylaw No. 3615 Saltair Water System Service Amendment Bylaw, 2012" that amends "Bylaw No. 2178 Saltair Water System Service Establishment Bylaw, 2001", by increasing the maximum annual tax requisition from \$190,000 to \$490,000, be forwarded to the Board for consideration of three readings and, following provincial approval, adoption.

MOTION CARRIED

RESOLVE INTO CLOSED SESSION 4:40 p.m.

It was moved and seconded that the meeting be closed to the public in accordance with the Community Charter, Part 4, Division 3, Sections 90 (1) (e) and .

MOTION CARRIED

RISE FROM CLOSED SESSION 5:25 p.m. It was moved and seconded that the Committee rise without report.

MOTION CARRIED

ADJOURNMENT

It was moved and seconded that the meeting be adjourned.

MOTION CARRIED

The meeting adjourned at 5:26 p.m.

Chair

Recording Secretary

Dated:



R1

STAFF REPORT

ENGINEERING AND ENVIRONMENTAL SERVICES COMMITTEE MEETING OF JULY 25, 2012

DATE:

July 4, 2012

FILE NO:

5600-40-WRW

FROM:

Louise Knodel-Joy, Senior Engineering Technologist, Water Management Division

SUBJECT:

Woodley Range Water System - Electoral Area H

Service Establishment and Loan Authorization Bylaws

Recommendation:

That it be recommended to the Board:

- 1. That the *Certificate of Sufficiency*, confirming that sufficient petitions requesting establishment of a Water System Service Area and authorizing the borrowing of up to \$50,000.00, be received.
- 2. That Service Establishment and Loan Authorization bylaws for the Woodley Range Water System Service Area be prepared and forwarded to the CVRD Board for consideration of three readings, and, following provincial approval, adoption.
- 3. That, following adoption of the Service Establishment and Loan Authorization Bylaws, a Capital Reserve Fund Establishment Bylaw, a Parcel Tax Roll Bylaw and a Management Bylaw be prepared for the Woodley Range Water System, and that these bylaws forwarded to the Board for consideration of three readings and adoption.

Relation to the Corporate Strategic Plan: Provides a reliable essential service.

Financial Implications: (Reviewed by Finance Division:

Service costs, estimated to be \$36,800 annually, are to be recovered through a combination of parcel taxes and user fees on the parcels within the participating service area. The service area consists of 37 residential properties. A breakdown of costs is: \$7,200 in user fees and \$29,600 in parcel taxes. The CVRD has requested and received Gas Tax funding to fund a portion of the required upgrades to the water system. This grant will provide \$260,000 of an estimated \$423,000 required to upgrade this water system. MFA 10 year long term borrowing of up to \$50,000 and approximately \$113,000 from the B.C. Ministry of Forests, Lands and Natural Resource Operations Replacement Reserve Trust fund will contribute the remainder. Annual costs per property will be: \$400 for User Fees, \$800 for Parcel Tax which includes Debt Retirement of \$156.

Background:

The following resolution was ratified by the Cowichan Valley Regional District Board at its regular meeting of June 8, 2011:

That it be recommended that:

- 1. The Board provide first stage approval and authorize staff time to continue with the process of investigating takeover of the Woodley Range Water System, located in Electoral Area H, as requested by Woodley Range Water Works Ltd. subject to the following conditions and with the understanding that nothing is intended by this approval to fetter future CVRD Board decisions on required bylaws:
 - All lands with infrastructure works are to be transferred to CVRD, or, if not possible be placed within registered Statutory Rights-of-way, using the CVRD's standard charge terms;
 - A utility transfer agreement be executed between the CVRD and the owners;
 - A CVRD review of the system be undertaken in order to address deficiencies in the water system;
 - The owner of the utility be willing to transfer the system to the CVRD:
 - A public consultation process regarding CVRD takeover be undertaken;
 - A petition process be carried out and completed by at least 50% of the owners of parcels within the proposed service area with the total value of the parcels representing at least 50% of the net taxable value of all land and improvements in the service area.
 - This list is not exhaustive and items may be added, deleted or altered prior to a formal agreement being executed; and further
- 2. That an assessment of the system be carried out, funded to a maximum cost of \$15,000, to be funded from the CVRD Feasibility Study Function and, regardless of ownership transfer, repaid in full from funds held for Woodley Range Water System by the Comptroller of Water.
- 3. That, upon completion of a successful petition process, bylaws be prepared to create a service area for this utility.

A total of 34 out of 37 petitions to establish a water service area and borrow up to \$50,000.00 were received, of which 34 were accepted as valid. Pursuant to Section 797.4 of the *Local Government Act*, a petition is deemed sufficient if at least 50% of the owners of parcels within the proposed service area sign it, **and** the total value of their parcels represent at least 50% of the net taxable value of all land and improvements within the service area. In this case, the petitions received equal 92% of the property owners holding 91.8% of the net taxable value of all land and improvements within the proposed service area. Therefore the petitions are deemed sufficient and the CVRD has the authority to proceed with establishment of the service area and borrowing up to \$50,000.00. (the Certificate of Sufficiency is attached.) The Water Feasibility Study and public consultation process has been completed.

Submitted by

Louise Knodel-Joy, Senior Engineering Technologist

Water Management Division

Engineering & Environmental Services

Reviewed by:
Division Manager:

Approved by:



CERTIFICATE OF SUFFICIENCY

I hereby certify that the petition to establish the Woodley Range Water System and authorize the borrowing of up to \$50,000 over a 10 year period to cover costs associated with upgrades to the works of the *Woodley Range Water System Service Area*, within a portion of Electoral Area H – North Oyster/Diamond, is sufficient pursuant to section 797.4 of the *Local Government Act*.

DATED at Duncan, British Columbia this 12th day of July, 2012.

Kathleen Harrison, Deputy Corporate Secretary

Woodley Range Water System Service Area

Total Number of Parcels in the Service Area:

37

Net Taxable Value of All Land and Improvements of Parcels

within the Service Area:

\$20,592,000

Number of Valid Petitions received (92%):

34

Net Taxable Value of Petitions received (Land and Improvements): (91.8%)

\$18,902,000



R2

ENGINEERING AND ENVIRONMENTAL SERVICES COMMITTEE MEETING OF JULY 25, 2012

DATE:

July 05, 2012

FILE NO:

5330-30-DRW

FROM:

Dave Leitch, AScT, Manager, Water Management Division

SUBJECT

Dogwood Ridge Capital Works Upgrades

Recommendation:

That staff continue to pursue discussions with the Cowichan Tribes to expand the Dogwood Ridge Water System and develop a servicing agreement with Cowichan Tribes and INAC to provide water to "Cowichan Indian Reserve No. 1, Parcel 112-1" on Cowichan Tribes lands.

Relation to the Corporate Strategic Plan: Provides a reliable essential service.

Financial Implications: (Reviewed by Finance Division:

Capital upgrades to the Dogwood Ridge Water System we're completed in 2011 at a cost of approximately \$539,000. Funding for these works included approximately \$266,666 in Provincial funding, \$92,500 in MFA borrowing, \$136,952 in Community Works Funding and \$42,955 in reserve and operating funds. The Dogwood Ridge project was allocated \$200,000 from the 2010-2011 Community Works Funds and of that, \$63,048 remains unspent in the 2012 Dogwood Ridge capital budget.

Background:

The Dogwood Ridge Water System services a 33-lot subdivision, three kilometres south of Duncan, in Electoral Area E.

In February, 2008, the Dogwood Ridge Improvement District received approval-in-principle for CVRD takeover and a feasibility assessment of the water system was subsequently undertaken.

In 2008, a joint feasibility study was completed in partnership with Cowichan Tribes to identify the costs to upgrade the water system to the CVRD standard and examine the potential costs to connect a number of First Nations homes on Kelly/Wilson Rd. The study was jointly funded between Cowichan Tribes and the CVRD with the notion of a partnership agreement where each party would pay their appropriate portion of the capital upgrades and the CVRD would operate the water system and provide water to the First Nations homes. The advantage to this would be that both the Dogwood Ridge community and Cowichan Tribes would benefit in the savings of constructing the works together and operating a single system.

.../2

At the completion of the study, CVRD staff met with representatives from Cowichan Tribes who informed us that they were not successful in obtaining funds from INAC and that at this time they could not move forward with any type of cost-sharing agreement. As a result, the upgrades to the Dogwood Ridge Water System were funded and completed independently from the local service area residents.

To date, the upgrades to the water system include a new reservoir, water treatment building and some looping of the watermains at a cost of approximately \$539,000. Additional works that were recommended to be completed in the upgrades were securing an additional source of water and the installation of UV disinfection. Neither of these recommendations could be completed as a result of either a lack of available water and/or financial resources.

Included in the funding of this project was \$200,000 from Community Works Funds. As this project had a number of funding sources that only allowed for a certain level of Federal funding, there is still \$63,048 in Community Works Funds in the Dogwood Ridge capital budget that has not been spent.

In June, 2012, CVRD staff met with members of Cowichan Tribes and INAC who have recently received funding to design the necessary works to connect Kelly Road/Wilson Road Cowichan Tribes homes to the Dogwood Ridge Water System contingent on the fact that the CVRD be willing to enter into a servicing agreement with the Cowichan Tribes to provide water to these homes. Based on in principle discussions with the Cowichan Tribes, any agreement between the CVRD and Cowichan Tribes would be conditional on the Cowichan Tribes providing a new water source to the system, providing the necessary easements and Rights of Ways to the CVRD, paying the cost of the infrastructure to extend the watermain to the end of Wilson Road, and paying the same annual user fees that the residents in Dogwood Ridge are currently paying. As an additional mutual benefit to both parties, UV treatment infrastructure would be provided and the CVRD would use its remaining Community Works money to help contribute to this cost.

By the CVRD partnering with the Cowichan Tribes on this project, the Dogwood Ridge community would acquire an additional well to augment their water supply, more users would be brought onto the system to pay back the existing debt and help insure rate stability, and an additional level of water treatment would be provided to help ensure clean, safe drinking water to all users of the system at no additional cost.

Reviewed by: Division Manager:

Submitted by

Dave Leitch, ASeT

Manager, Water Management Division

DL/LKJ/ilb

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R3

ENGINEERING & ENVIRONMENTAL SERVICES COMMITTEE MEETING OF JULY 25, 2012

DATE:

July 4, 2012

FILE NO:

0400-01-EA-E

FROM:

Louise Knodel-Joy, Engineering Technologist, Water Management Division

SUBJECT

First Stage Approval for CVRD takeover of the Fairbridge Water System

Recommendation:

That it be recommended to the Board that:

- 1. First stage approval and authorization of staff time be provided to investigate the takeover of the Fairbridge Water System, located in Electoral Area E, as requested by Doug McPhee, operator of the Fairbridge Strata Water Utility, subject to the following conditions and with the understanding that nothing is intended by this approval to fetter future CVRD Board decisions on required bylaws:
 - All lands with infrastructure works are to be transferred to the CVRD, or, if not possible be placed within registered Statutory Rights-of-way, using the CVRD's standard charge terms;
 - A utility transfer agreement be executed between the CVRD and the owner;
 - A CVRD review of the system be undertaken in order to address deficiencies in the water system;
 - The owner of the utility be willing to transfer the system to the CVRD;
 - A public consultation process regarding CVRD takeover be undertaken;
 - A petition process be carried out and completed by at least 50% of the owners of parcels within the proposed service area with the total value of the parcels representing at least 50% of the net taxable value of all land and improvements in the service area.
 - This list is not exhaustive and items may be added, deleted or altered prior to a formal agreement being executed; and further
- 2. That an assessment of the system be carried out, funded to a maximum cost of \$15,000 from the CVRD Feasibility Study Function and repaid upon establishment of a CVRD function for this water system.
- 3. That, upon completion of a successful petition process, bylaws be prepared to create a service area for this utility.

Relation to the Corporate Strategic Plan: Provides a reliable essential service.

Financial Impact: (Reviewed by Finance Division:

The request to investigate takeover of this system was just received, therefore it is anticipated that CVRD-operation of this utility would not proceed until 2013. All costs to operate the utility would be borne by the users of the system. The feasibility study will be funded to a maximum cost of \$15,000, with funding provided by the CVRD Feasibility Study Function (130). The Feasibility Study function allows for approximately four studies a year and has not been fully committed. The utility currently has a reserve fund balance of approximately \$85,000, which is held by Strata VIS693.

Background:

The Fairbridge Water System services 39 residential strata lots and includes two separate supply wells, reservoir, water treatment building, and water distribution system. The water system is approximately 40 years old and has been well maintained.

A review of the system is required to assess necessary upgrades required for the CVRD to take over and operation of this water system.

eviewed.by:

Manag

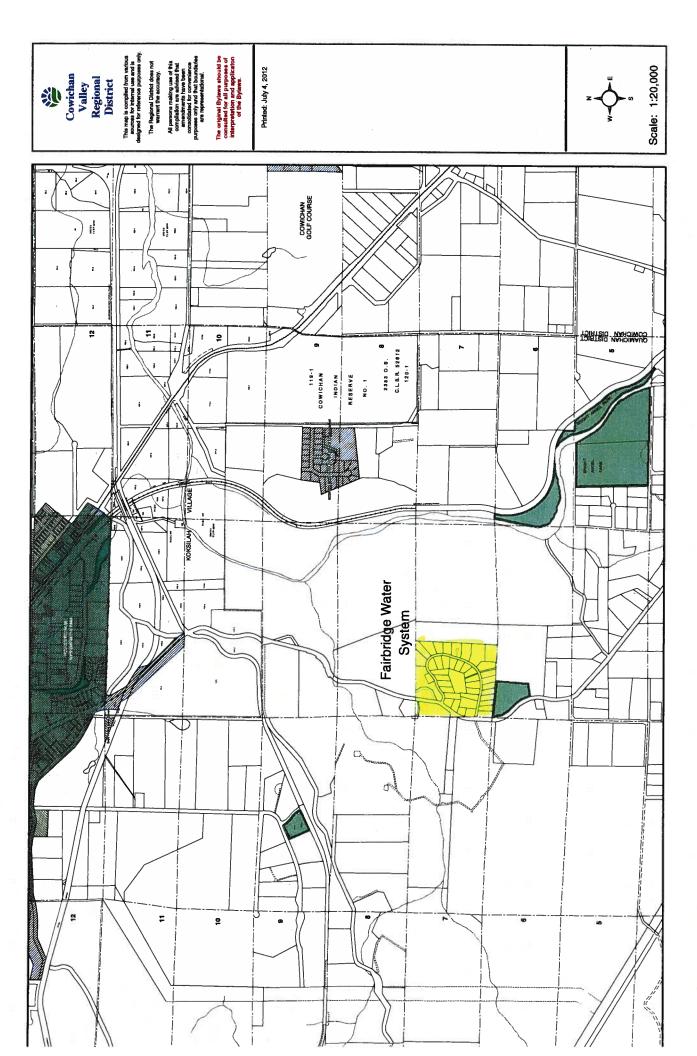
Submitted by,

Louise Knodel-Joy

Senior Engineering Technologist Water Management Division

LKJ/jlb

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Louise Knodel-Joy

From:

DOUG MCPHEE <dougmcphee10@hotmail.com>

Sent:

Friday, July 06, 2012 2:47 PM

To: Subject: Louise Knodel-Joy Fairbridge Water System

Hi Louise and David,

Thank you for the meeting July 4, 2012. It was a pleasure to meet and talk with you both and I look forward to future discussions.

I would like to formally request an engineering study to be done on Fairbridge Strata 693 water system with the hope of turning our water system over to the CVRD.

I am on the strata council and responsible for the water system. I have sent a notice to residents advising them that I was requesting a study done.

I am available at your request for any information that would be helpful to you.

I look forward to learning about and supporting this initiative.

Regards,

Doug McPhee 4762 Fairbridge Drive Duncan, BC V9L 6N8

Tel: 250-746-0642 work 250-715-0104 home 250-732-3561 cell 250-746-7445 Fax



R4

ENGINEERING & ENVIRONMENTAL SERVICES COMMITTEE MEETING OF JULY 25, 2012

DATE:

July 5, 2012

FILE NO:

5360-30-01

FROM:

Laura Nessman, Environmental Resource Assistant

SUBJECT:

Bylaw No. 1958 - CVRD Garbage and/or Recyclable Materials Collection

Amendment

Recommendation/Action:

That it be recommended that "CVRD Bylaw No. 3614 – Cowichan Valley Regional District Garbage and/or Recyclable Materials Collection Amendment Bylaw, 2012" be forwarded to the Board for consideration of three readings and adoption.

Relation to the Corporate Strategic Plan: Maintain a reliable essential service.

Financial Impact: (Reviewed by Finance Division: NOT REQUIRED)

Background:

The attached bylaw provides the following two amendments:

- 1. Section 5.1.(a) has been revised in its entirety in order to be prohibitive rather than permissive (i.e. 'shall' has been changed to 'shall not'). These changes have been made in order to aid with bylaw enforcement. Section 5.1.(a)(ii) has been amended further in order to address issues concerning wildlife and garbage. Time restrictions have been placed on when Garbage Containers and/or Recycling Containers can be placed out on the day designated for the collection. These amendments prohibit Eligible Residents to place Garbage Containers and/or Recycling Containers out for collection before 5:00 a.m. or after 8:00 a.m. on the designated collection day. These time constraints, although they will not be actively enforced, will assist when addressing wildlife and garbage associated problems.
- 2. Schedule A has been revised, as requested by Director Fraser, to allow those residents living in Electoral Area B, north of the Koksilah River, to subscribe, if they choose, to the same Curbside Collection service that is provided in the adjacent Electoral Area E. The Koksilah River acts as a geographical barrier for the these Electoral Area B residents, separating them from the rest of Electoral Area B. In terms of accessibility by road, these residents are more closely connected to the adjacent Electoral Area E than they are to the rest of Electoral Area B. The electoral area boundary line that divides these two areas determines two distinct collection services.

Submitted by,

Laura Messman

Laura Nessman
Environmental Resource Assistant
Engineering & Environmental Services

Reviewed by:
Division Manager:

Approved by:
General Manager



COWICHAN VALLEY REGIONAL DISTRICT

BYLAW No. 3614

A Bylaw to amend Bylaw No. 1958 – Cowichan Valley Regional District Garbage and/or Recyclable Materials Collection Bylaw

WHEREAS the Board of Directors of the Cowichan Valley Regional District established collection rates for the collection of garbage and/or recyclable materials under the provision of Bylaw No. 1958, cited as "CVRD Bylaw No. 1958 – Cowichan Valley Regional District Garbage and/or Recyclable Material Collection Bylaw, 1999";

AND WHEREAS the Board of Directors of the Cowichan Valley Regional District deems it desirable to amend Section 5.1 (a) and Schedule A of the Bylaw, and to add Schedule C;

NOW THEREFORE the Board of Directors of the Cowichan Valley Regional District, in open meeting assembled, enacts as follows:

1. CITATION

This Bylaw may be cited for all purposes as "CVRD Bylaw No. 3614 – Cowichan Valley Regional District Garbage and/or Recyclable Materials Collection Amendment Bylaw, 2012".

2. AMENDMENT

- a) That Section 5.1 (a) be deleted in its entirety and replaced with the following:
 - (1) Residents' Responsibility
 - (a) Every owner or occupier of an *Eligible Residence(s)* served by the *Regional Collection System* shall not:
 - (i) place *Garbage* in any container other than a *Garbage Container*, if provided with *Garbage* service.
 - (ii) place *Garbage Containers* and/or *Recycling Containers* out before 5:00 a.m. or after 8:00 a.m. on the day designated for the *Eligible Residence(s)* for collection, and shall not place *Garbage Containers* anywhere but in full view and as close as possible to the edge of the travelled way serving the premises, without obstructing traffic.
 - (iii) place **Garbage Containers** and/or **Recycling Containers** so that they are inaccessible from the lane so that refuse workers will be required to enter upon private property, open gates, climb or descend stairs, or lift containers over fences for emptying.
 - (iv) leave any plastic bags untied, or otherwise unsealed, allowing spillage or entry of water, in a *Garbage Container* for collection.

- (v) place untagged extra *Garbage Containers* out for collection, as described in Schedule A, so that they are not clearly visible to refuse workers.
- (vi) set out more *Garbage Containers* for collection than described in Schedule "A" Item (1) without additional *Garbage Containers* having tags as described in Schedule "A" Item (2), with the total number of *Garbage Containers* not to exceed three (3) with weekly service, or six (6) with bi-weekly service.
- (vii) leave Garbage Containers and/or Recycling Containers on the public street or lane, after emptying, on the same day that service is provided.
- b) That Schedule A to Bylaw No. 1958 be deleted its entirety and replaced with Schedule A attached hereto and forming part of this bylaw.
- c) That Schedule C, attached hereto, form part of Bylaw No. 1958.

Chairperson	Corporate	e Secretary
	6	
ADOPTED this	day of	, 2012.
READ A THIRD TIME this	day of	, 2012.
READ A SECOND TIME this	day of	, 2012.
READ A FIRST TIME this	day of	, 2012.



SCHEDULE A

TO BYLAW NO. 1958

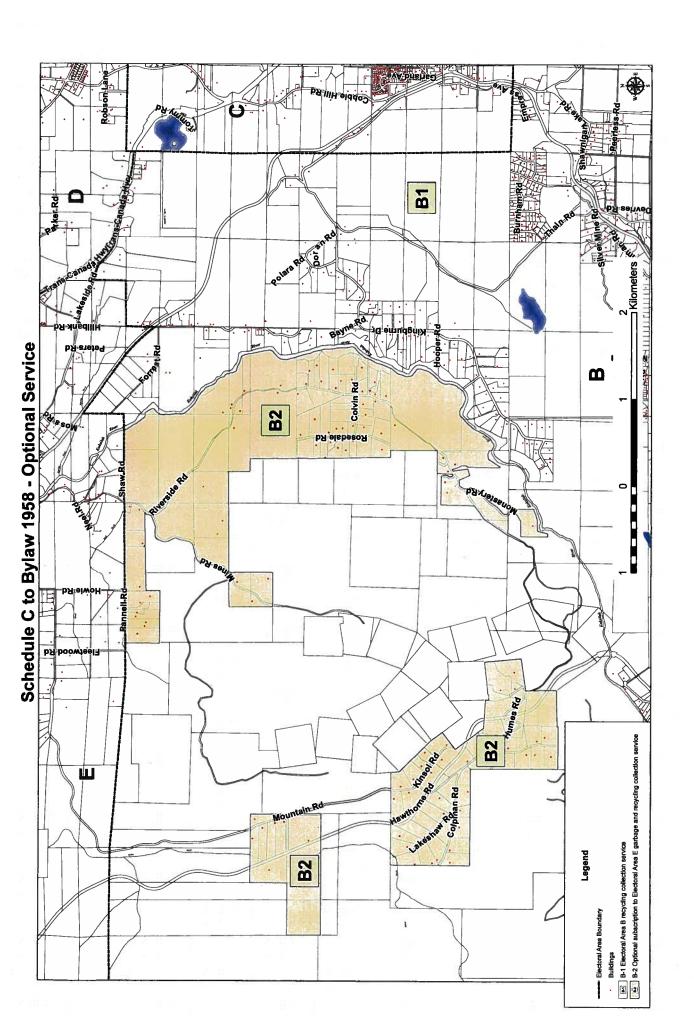
RECYCLING AND GARBAGE COLLECTION RATES

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Electoral Area	Frequency of Garbage Collection Service	Maximum Number of Garbage Containers Collected per Service	Frequency of Recycling Collection Service	Basic Rate (Per Annum)	
A	None	None	Bi-weekly	45.00	
B-1	None	None	Bi-weekly	45.00	
**B-2	Bi-weekly	2 with bi-weekly service	Bi-weekly	152.00	
С	None	None	Bi-weekly	49.00	
D	Bi-weekly	2 with bi-weekly service	Bi-weekly	152.00	
E	Bi-weekly	2 with bi-weekly service	Bi-weekly	152.00	
F	Bi-weekly, Weekly June 15 – Oct. 15	2 with bi-weekly service 1 with weekly service	Bi-weekly	178.00	
G	Bi-weekly	2 with bi-weekly service	Bi-weekly	152.00	
Н	None	None	Bi-weekly	49.00	
I	Bi-weekly, Weekly June 15 – Oct. 15	2 with bi-weekly service 1 with weekly service	Bi-weekly	178.00	

- 2. **B-2 Upon written request, residents in Electoral Area B residing north of the Koksilah River (see attached Schedule C) may choose to subscribe to either the recycling collection service provided in Electoral Area B, or to the garbage and recycling collection service provided in the adjacent Electoral Area E. Property owners will be charged accordingly, depending on which single collection service they subscribe to.
- 3. Tags for disposal of extra *Garbage* allows for setting out additional *Garbage Containers* over and above those permitted under Item 1, but limited to the maximum specified under Section 5 (1)(a) (vi).

\$2.50 per Garbage Container





ENGINEERING AND ENVIRONMENTAL SERVICES COMMITTEE MEETING OF JULY 25, 2012

DATE:

June 27, 2012

FILE NO:

Reviewed by Division Mahager:

oved by:

derali Manag

5225-06-LRD

FROM:

Jeralyn Jackson, AScT., PMP, Capital Projects

SUBJECT: Lanes Road Drainage Service Areas Amendment Request

Recommendation:

That it be recommended to the Board:

1. That the Certificate of Sufficiency, confirming that a sufficient petition requesting inclusion into the Lanes Road Drainage service area be received.

2. That "CVRD Bylaw No. 3078 - Lanes Road Drainage System Service Establishment Bylaw, 2008", be amended to include "PID 001-098-241, Lot 3, Section 4, Range 6, Plan 32129, Cowichan District".

3. That the amended bylaw be forwarded to the Board for consideration of 3 readings and adoption.

Relation to the Corporate Strategic Plan: Provides a reliable essential service.

Financial Impact: (Reviewed by Finance Division:

The annual cost of providing a drainage service is recovered through property value taxes to be requisitioned and collected on the basis of the net taxable value of land and improvements within the service area. This amendment will bring 15 new users into the drainage service area for a total of 45 properties, for which the total cost to be recovered is \$6,000 annually. This amount is not expected to increase in 2013.

Background:

As part of the 2012 Lambourn Estates - Lanes Road water and sewer system upgrades, one of the developers, Nick Faber, requires inclusion into the Lanes Road drainage service area as he has drainage features on his property. Mr. Faber's development represents 15 new lots to be added to the drainage service area.

A valid Certificate of Sufficiency and site plan are attached for information.

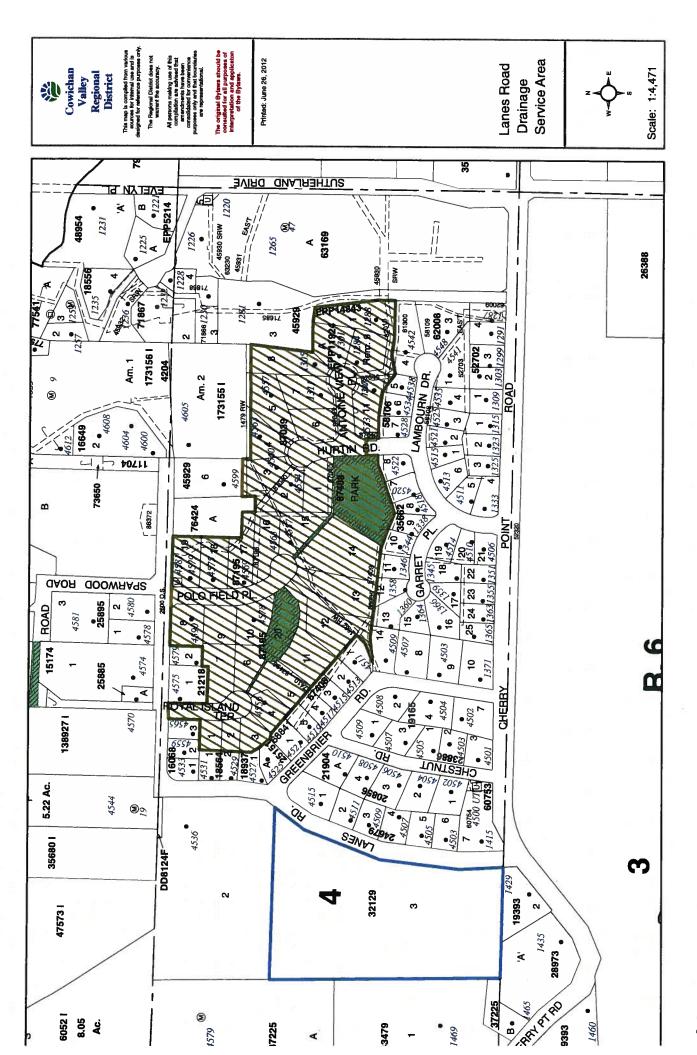
Submitted by

Jeralyn Jackson, AScT., Capital Projects, **Engineering & Environmental Services**

JHJ:jlb

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20





CERTIFICATE OF SUFFICIENCY

I hereby certify that the petition for inclusion into the *Lanes Road Drainage System Service Area* within a portion of Electoral Area D – Cowichan Bay is sufficient pursuant to section 797.4 of the *Local Government Act*.

DATED at Duncan, British Columbia this 16th day of July, 2012

Kathleen Harrison, Deputy Corporate Secretary

1

Lanes Road Drainage System Service Area

Total Number of Parcels Requesting Inclusion in Service Area:

Net Taxable Value of All Land and Improvements: \$297,000

Number of Valid Petitions Received:

Net Taxable Value of Petitions Received (Land and Improvements): \$297,000



R6

ENGINEERING & ENVIRONMENTAL SERVICES COMMITTEE MEETING OF JULY 25, 2012

DATE:

June 29, 2012

FILE NO:

5520-20/EA-A

FROM:

Joanne Bath, Administrative Coordinator, Engineering & Environment

SUBJECT:

Mill Bay Critical Street Lighting - Maximum Requisition Limit Increase

Recommendation/Action:

1. That a bylaw be prepared to amend "CVRD Bylaw No. 2137 – Electoral Area A - Mill Bay/Malahat Critical Location Street Lighting Service Establishment Bylaw, 2001", to increase the maximum requisition limit from \$2,000 to \$5,000.

2. That the amendment bylaw be forwarded to the Board for consideration of three

readings and, following provincial and voter approval, adoption.

3. That voter approval for adoption of the amendment bylaw be obtained through an Alternative Approval Process.

Relation to the Corporate Strategic Plan: Provides a reliable essential service.

Financial Impact: (Reviewed by Finance Division:

The annual cost of providing for this critical street lighting service is recovered by requisition of money collected by a property value tax on land and improvements on all properties within Electoral Area A. The total annual requisition for the fiscal year 2012 is \$1,100. Staff are recommending an increase in the maximum requisition limit from \$2,000 to \$5,000, in order to offset future hydro increases and to add three new requested critical streetlights to the system.

Background:

The requisition for this system has never been increased and is now reaching its maximum requisition limit. Also, there is no money budgeted to allow for new streetlight capital installation costs.

Before the amendment bylaw can be adopted, the Inspector of Municipalities and service area electors must grant approval. Pursuant to Section 797.5 of the *Local Government Act* and Section 84 of the *Community Charter*, voter approval for this amendment may be obtained through an alternative approval process.

Submitted by,

Joanne Bath, Administrative Coordinator Engineering & Environmental Services

/jlb \\Cvrdstore1\e_e\Administration\Staff Reports\E&E\2012\AAP-MillBayCriticaltreetlighting-Jul-25-12.docx

Reviewed by:
Division Manager:

Approved by:
General Manager



R7

STAFF REPORT

ENGINEERING AND ENVIRONMENTAL SERVICES COMMITTEE MEETING OF JULY 25, 2012

DATE:

July 4, 2012

FILE NO:

0400-20-SWS

FROM:

Louise Knodel-Joy, Senior Engineering Technologist, Water Management Division

SUBJECT:

Shellwood Water System - Electoral Area H

Service Establishment and Loan Authorization Bylaws.

Recommendation:

That it be recommended to the Board:

- 1. That the *Certificate of Sufficiency*, confirming that sufficient petitions requesting establishment of a Water System Service Area and authorizing the borrowing of up to \$85,000.00, be received.
- 2. That Service Establishment and Loan Authorization bylaws for the Shellwood Water System Service Area be prepared and forwarded to the CVRD Board for consideration of three readings and, following provincial approval, adoption.
- 3. That, following adoption of the Service Establishment and Loan Authorization Bylaws, a Capital Reserve Fund Establishment Bylaw, a Parcel Tax Roll Bylaw and a Management Bylaw be prepared for the Shellwood Water System, and that these bylaws forwarded to the Board for consideration of three readings and adoption.

Relation to the Corporate Strategic Plan: Provides a reliable essential service.

Financial Implications: (Reviewed by Finance Division: ______)
Service costs, estimated to be \$32,800 annually, are to be recovered through a combination of parcel taxes and user fees on the parcels within the participating service area. The service area consists of 32 properties and a park. A breakdown of costs is: \$10,400 in user fees and \$22,400 in parcel taxes. The CVRD has requested and received Gas Tax funding to fund a portion of the required upgrades to the water system. This grant will provide \$260,000 of an estimated \$450,000 required to upgrade this water system. MFA 20 year long term borrowing of up to \$85,000 and approximately \$105,000 from the system reserve funds will contribute the remainder. Annual costs per property will be: \$400 User Fees, \$700 Parcel Tax which includes Debt Retirement of \$194.

Background:

The following resolution was ratified by the Cowichan Valley Regional District Board at its regular meeting of December 9, 2009:

"That the Board provide first stage approval and authorize staff time to continue with the process of investigating takeover of the Shellwood Improvement District Water System, located in Electoral Area H – North Oyster/Diamond, as requested by Shellwood Improvement Trustees, subject to the following conditions and with the understanding that nothing is intended by this approval to fetter future CVRD Board decisions on required bylaws:

- All lands on which infrastructure works are located will be placed within registered Statutory Rights-of-way, using the CVRD's standard charge terms;
- A utility transfer agreement be executed between the CVRD and the owners;
- A review of the system be undertaken in order to address deficiencies in the water system;
- The owner of utility be willing to sell and/or transfer the system to the CVRD;
- A public consultation process regarding CVRD takeover be undertaken;
- A petition process be carried out and completed by at least 50% of the owners of parcels within the proposed service area with the total value of the parcels representing at least 50% of the net taxable value of all land and improvements in the service area.
- This list is not exhaustive and items may be added, deleted or altered prior to a formal agreement being executed.

and further that an assessment of the system be carried out, funded to a maximum cost of \$15,000, with \$5,000 from the CVRD Feasibility Study Function and \$10,000 through a Provincial Feasibility Study Grant; and that, upon completion of a successful petition process, bylaws be prepared to create a service area for this utility."

A total of 24 out of 32 petitions to establish a water service area and borrow up to \$85,000.00 were received, of which 22 were accepted as valid. (one was invalid and one was received after closing) Pursuant to Section 797.4 of the *Local Government Act*, a petition is deemed sufficient if at least 50% of the owners of parcels within the proposed service area sign it, **and** the total value of their parcels represent at least 50% of the net taxable value of all land and improvements within the service area. In this case, the petitions received equal 71% of the property owners holding 73.9% of the net taxable value of all land and improvements within the proposed service area. Therefore the petitions are deemed sufficient and the CVRD has the authority to proceed with establishment of the service area and borrowing up to \$85,000.00. (the Certificate of Sufficiency is attached.) The Water Feasibility Study and public consultation process has been completed.

Submitted by.

Louise Knodel-Joy, Senior Engineering Technologist Water Management Division

Engineering & Environmental Services

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LKJ:jlb

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Reviewed by:



CERTIFICATE OF SUFFICIENCY

I hereby certify that the petition to establish the Shellwood Water System and authorize borrowing of up to \$85,000 over a 20 year period to cover costs associated with upgrades to the works of the Shellwood Water System Service Area, within a portion of Electoral Area H – North Oyster/Diamond, is sufficient pursuant to section 797.4 of the Local Government Act.

DATED at Duncan, British Columbia this 13th day of July, 2012.

Athleen Harrison, Deputy Corporate Secretary

31

Shellwood Water System Service Area

Total Number of Parcels in the Service Area:

(Excluding 2 Exempt Parcels)

Net Taxable Value of All Land and Improvements of Parcels

(not exempt from taxation) within the Service Area:

\$15,404,900

Number of Valid Petitions received (71%):

22

Net Taxable Value of Petitions received (Land and Improvements): (73.91%)

\$11,385,900



REPORT R8

STAFF REPORT

ENGINEERING & ENVIRONMENTAL SERVICES COMMITTEE MEETING OF JULY 25, 2012

DATE:

July 16, 2012

FILE NO:

5380-01-DIR

FROM:

Laura Nessman, Environmental Resource Assistant

SUBJECT:

The Cowichan Recyclopedia - The A to Z of Zero Waste

Recommendation/Action: For information only.

Relation to the Corporate Strategic Plan: This initiative will contribute to meeting the objective of Responsible Waste Management.

Financial Impact: (Reviewed by Finance Division: NOT REQUIRED)

Background:

The CVRD Recycling and Waste Management Division recently developed *The Cowichan Recyclopedia*, a new online recycling directory intended to provide CVRD residents with accessible information regarding how to reduce, reuse, and recycle various products and materials. Although the CVRD has had a recycling directory available online for a number of years, this directory is in a PDF format, making it difficult to navigate and costly to update. The new *Recyclopedia* is fully digitized, easy-to-access, and can be updated at anytime.

The Cowichan Recyclopedia contains a large list of materials, ranging from batteries and cell phones, to hot water tanks and furniture, and provides links to facilities within the region that will accept the particular item for recycling. The directory will help educate citizens of the options that exist for not only recycling materials, but also for how to reuse items, and, better yet, how to reduce use. Further education will assist in increasing the CVRD's diversion rates and will help move the CVRD closer towards its goal of zero waste.

The Cowichan Recyclopedia will be launched September 2012 and will be promoted through a variety of ways, including news releases, radio jingles, a blog post, and public outreach programs. Staff are currently researching the feasibility of developing a mobile application to host the Recyclopedia, which may be an option for the CVRD to consider in the future.

Submitted by,

Laura Nessman

Environmental Resource Assistant

Sama Messmour

Engineering & Environmental Services

\\Cvrdstore1\e_e\Administration\Staff Reports\E&E\2012\Cowichan Recyclopedia-Jul25-12.docx

Reviewed by:
Division Manager:

Approved by:
General Manager:



ENGINEERING & ENVIRONMENTAL SERVICES COMMITTEE MEETING **OF JULY 25, 2012**

DATE:

July 16, 2012

FILE NO:

5360-00-BCSWMC

FROM:

Laura Nessman, Environmental Resource Assistant

SUBJECT: Mattress and Box Spring Diversion Pilot Program

Recommendation/Action: For information only.

Relation to the Corporate Strategic Plan: This initiative will contribute to meeting the objective of Responsible Waste Management and contribute to reducing regional solid waste.

<u>Financial Impact:</u> (Reviewed by Finance Division: NOT REQUIRED)

Potential cost savings of \$5,000 to \$10,000 per year will be realized within the Solid Waste Management budget (520).

Background:

Mattresses and box springs pose many waste management challenges. These items are relatively lightweight, and take up an average of 0.7 cubic metres (25 cubic feet) each, resulting in transportation logistic difficulties, high disposal costs, and negative impacts on landfills. Mattresses are common within the regional waste stream, and it is therefore worthwhile to look into ways they can be diverted from the landfill.

In May 2012, the CVRD Recycling and Waste Management Division launched an informal pilot program for recycling mattresses and box springs. Since the program began, 350 mattresses and box springs have been collected at the CVRD Bings Creek Solid Waste Management Complex. These items have been packed in 40-yard trailers and shipped two trailers at a time to a facility in Victoria for processing, where approximately 72% of all mattress and box spring material received is recycled.

Prior to this mattress and box spring recycling program, the CVRD shipped these items to the landfill in Rabanco, WA. By diverting mattresses and box springs away from the landfill and instead to a recycling facility on the island, between \$5,000 and \$10,000 in annual savings could potentially be realized.

Given the success of the pilot program, the Mattress and Box Spring Recycling Program will continue at Bings Creek, where the regular fee of \$140 per tonne or a \$5 minimum will still apply to customers. Staff plan to offer this recycling program at the Peerless Road Drop-off Depot as well, once planned facility upgrades are complete. The program will not be offered at the Meade Creek Drop-off Depot at this time due to space limitations. The public will be informed of the program by way of local newspapers, radio station, and the Zero Waste Cowichan website. Information will also be included within the CVRD's Recycling Directory, expected to launch this summer.

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Mattresses and box springs are slated for eventual inclusion under BC's recycling regulation (*Environmental Management Act*), with a product stewardship program coming into effect by 2017. In the meantime, until this program is launched and further details are available, a CVRD mattress and box spring recycling program will effectively contribute to the reduction of regional solid waste. In the future, once the program is well established and recycling options are convenient and widely available, the Board may wish to consider amending Bylaw No. 2108 – Solid Waste Management Charges and Regulations to prohibit mattresses and box springs from being disposed of as garbage.

Staff have determined that the manual separation of mattresses and box spring materials for recycling could potentially be carried out locally and plan to issue an RFP restricted to non-profit organizations in order to determine local capacity for a mattress and box spring recycling program. There is potential for this type of program to create job opportunities for those with barriers to employment and/or to provide a source of revenue to a local non-profit group. Local processing of these items would allow for the revenue from both the deconstruction of the items and the recycling of the component materials to stay within the region, and may also make it feasible for the CVRD to lower disposal fees for customers. By diverting mattresses and box springs out of the regional waste stream, the amount of waste shipped to Rabanco is decreased, resulting in financial savings, greenhouse gas emission reductions, and an extension of the landfill lifespan. A mattress and box spring recycling program also puts the CVRD one step closer towards achieving its goal of zero waste.

Reviewed by: Division Manager

Submitted by,

Laura Nessman

Environmental Resource Assistant

Laura Nessman

Engineering & Environmental Services

LN:jlb

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R10

STAFF REPORT

ENGINEERING AND ENVIRONMENTAL SERVICES COMMITTEE MEETING OF JULY 25, 2012

DATE:

July 10, 2012

FILE NO:

5600-40-CWS

FROM:

Louise Knodel-Joy, Senior Engineering Technologist, Water Management Division

SUBJECT:

Carlton Water System - Electoral Area B

Service Establishment and Loan Authorization Bylaws

Recommendation:

That it be recommended to the Board:

- 1. That the *Certificate of Sufficiency*, confirming that sufficient petitions requesting establishment of a Water System Service Area and authorizing the borrowing of up to \$50,000.00, be received.
- 2. That Service Establishment and Loan Authorization bylaws for the Carlton Water System Service Area be prepared and forwarded to the Board for consideration of three readings and, following provincial approval, adoption.
- 3. That, following adoption of the Service Establishment and Loan Authorization Bylaws, a Capital Reserve Fund Establishment Bylaw, a Parcel Tax Roll Bylaw and a Management Bylaw be prepared for the Carlton Water System, and that these bylaws forwarded to the Board for consideration of three readings and adoption.

Relation to the Corporate Strategic Plan: Provides a reliable essential service.

Background:

The following resolution was ratified by the Cowichan Valley Regional District Board at its regular meeting of December 9, 2009:

"That the Board authorize staff time to continue with the process of investigating takeover of the Carlton Improvement District Water system, located in Electoral Area B, as requested by Carlton Improvement Trustees, subject to the following conditions and with the understanding that nothing is intended by this approval to fetter future CVRD Board decisions on required bylaws:

- All lands on which infrastructure works are located will be placed within registered Statutory Rights-of-way, using the CVRD's standard charge terms;
- A utility transfer agreement be executed between the CVRD and the owners;
- A CVRD review of the system be undertaken in order to address deficiencies in the water system;
- The owner of utility be willing to sell and/or transfer the system to the CVRD;
- A public consultation process regarding CVRD takeover be undertaken;
- A petition process be carried out and completed by at least 50% of the owners of parcels within the proposed service area with the total value of the parcels representing at least 50% of the net taxable value of all land and improvements in the service area.
- This list is not exhaustive and items may be added, deleted or altered prior to a formal agreement being executed

and further that an assessment of the system be carried out, funded to a maximum cost of \$15,000, with \$5,000 from the CVRD Feasibility Study Function and \$10,000 through a Provincial Feasibility Study Grant; and that, upon completion of a successful petition process, bylaws be prepared to create a service area for this utility."

A total of 22 out of 31 petitions to establish a water service area and borrow up to \$50,000.00 were received, of which 22 were accepted as valid and one petition was exempt. Pursuant to Section 797.4 of the *Local Government Act*, a petition is deemed sufficient if at least 50% of the owners of parcels within the proposed service area sign it, and the total value of their parcels represent at least 50% of the net taxable value of all land and improvements within the service area. In this case, the petitions received equal 86.7% of the property owners holding 86.07% of the net taxable value of all land and improvements within the proposed service area. Therefore the petitions are deemed sufficient and the CVRD has the authority to proceed with establishment of the service area and borrowing up to \$50,000.00. (the Certificate of Sufficiency is attached.) The Water Feasibility Study and public consultation process has been completed.

Reviewed by: Division Manager:

Approved by

Geharal Mana

Submitted by,

Louise Knodel-Joy, Senior Engineering Technologist

Water Management Division

L. Ludel - San

Engineering & Environmental Services

LKJ:jlb

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CERTIFICATE OF SUFFICIENCY

I hereby certify that the petition to establish the Carlton Water System and authorize borrowing of up to \$50,000 over a 10 year period to cover costs associated with upgrades to the works of the *Carlton Water System Service Area*, within a portion of Electoral Area B – Shawnigan Lake, is sufficient pursuant to section 797.4 of the *Local Government Act*.

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DATED at Duncan, British Columbia this 18th day of July, 2012.

athleen Harrison, Deputy Corporate Secretary

Carlton Water System Service Area

Total Number of Parcels in the Service Area: (Excluding 1 Exempt Parcel)

30

Net Taxable Value of All Land and Improvements of Parcels (not exempt from taxation) within the Service Area:

\$10,645,184

Number of Valid Petitions received (86.7%):

22

Net Taxable Value of Petitions received (Land and Improvements): (86.07%)

\$9,162,184



R11

ENGINEERING & ENVIRONMENTAL SERVICES COMMITTEE MEETING OF JULY 25, 2012

DATE:

July 18, 2012

FILE NO:

1880-20-SLNW

FROM:

Louise Knodel-Joy, Senior Engineering Technologist

SUBJECT:

Shawnigan Lake North Water Service Conservation

Fees and Village Containment Boundary

Recommendation:

That it be recommended that the CVRD apply a Water Conservation Fee of \$10,000 per connection to properties requesting inclusion into the Shawnigan Lake North Water System Service Area, lying within the Village Containment Area in the South Cowichan Official Community Plan, for the purpose of continued funding of the Water Conservation, Metering and Backflow Prevention Program.

Relation	to	the	Corn	orata	Strate	nic I	Dian.	Essential	contino
neialion	w	uie	COLP	orate	Strateg	qic i	rian:	Essentiai	service

Financial Impact: (Reviewed by Finance Division: _____)

New users brought into the service area, will generate additional user fees and conservation fees, thereby improving the financial stability of the Shawnigan Lake North Water System and the Water Conservation, Metering and Backflow Prevention Program.

Background:

The Shawnigan Lake North Water System services approximately 680 homes (690 parcels) in the service area with an annual allowable water licence withdrawal of 79,300,000 gallons per year from the Lake. When the water system was taken over in 1998, this water licence withdrawal often exceeded its limit. In recent years, through conservation and other measures, water usage has dropped within 85% of our allowable licence. As a result, the following resolution was ratified by the CVRD Board at its meeting of December 9, 2009:

That the CVRD apply a Water Conservation Fee of \$10,000 per connection to the following subject properties requesting inclusion into the Shawnigan Lake North Water System Service Area for the purpose of funding a Water Conservation, Metering And Backflow Prevention Program.

PID NOs.		
001-429-876	003-122-310	009-481-079
004-166-248	009-255-702	006-121-161
009-480-901	009-255-753	006-121-179
001-959-646	008-441-804	009-255-516
003-126-102		

This policy allowed for inclusion of several properties into the service area, which contributed to the *Water Conservation, Metering and Backflow Prevention Program*. Further requests from residents to join the Shawnigan Lake North Water System have since been received and therefore staff would like to expand the program to include the properties that lie within the Village Containment Boundary, as outlined in the South Cowichan Official Community Plan.

Reviewed by: Vivision Manager:

Brai Manad

Submitted by,

Louise Knodel-Joy, Senior Engineering Technologist

Water Management Division

LKJ/DL/jlb

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R12

ENGINEERING AND ENVIRONMENT COMMITTEE MEETING OF JULY 25, 2012

DATE:

July 17, 2012

FROM:

Kate Miller, Manager Regional Environmental Policy

SUBJECT: 2012 Community Emission and Inventory (CEEI) Information

Recommendation/Action: For information only.

Relation to the Corporate Strategic Plan:

This information is related to a broad spectrum of Corporate Strategic Plan components found in Sustainable Land Use and Healthy Environment specifically those related to climate change, sustainable land use and greenhouse gas reduction.

Financial Impact: (Reviewed by Finance Division:) None at this time.

Background:

The provincial government has committed to reducing greenhouse gas (GHG) emissions by 33% from 2007 levels by 2020. Further, the Province has enacted Bill 27 which required local governments to set reduction targets within their own boundaries as they have control or influence of approximately 45% of these emissions. British Columbia's Community Energy and Emissions Inventory (CEEI) provides local government with data on energy consumption and GHG emissions, at municipal and regional scales in order to assist in setting specific and measurable baselines and targets for policy and actions. This inventory is the first of its kind in Canada and was first developed in 2010, based on 2007 data and information. The Province has committed to updating the inventory every two years with updates on the base 2007 year. The Province has recently released the second update to this initiative. These updates are attached for reference as Appendix A.

While the data provided by the CEEI inventories and analysis provided information at the regional scale, it did not provide relevant data at a geographic level or planning scale necessary to undertake meaningful strategic policy or planning. As such, the CVRD undertook a more refined energy mapping and policy review to address many of the deficits of the original CEEI report, such as where and what types of energy are being used at a finer scale (lot). In February 2011, the Provincial and the Federal governments initiated a similar research project the Track and Neighborhood Data Modelling (TaNDM) to respond to many requests of local governments to improve reporting at a finer scale. The CVRD was asked to join this collaborative project and participate in the testing of new methods for collecting and analyzing data as a pilot community, due to our work and interest in this area and our parallel work with the CVRD energy mapping and modeling project.

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bproval:

General Manager

This project was intended to provide local governments with energy and GHG emission data at the neighborhood scale in both map (spatial) and database format for planning level purposes. The intent of the pilot was to align various data sources (BC Assessment data and local government cadastral information), align and deal with regulatory and privacy issues with information from energy providers (BC Hydro, Terasen and Fortis) and finally develop a consistent province-wide reporting methodology by building major category energy use (Residential, Commercial/Institutional and Industrial) by two different neighbourhood breakdowns: planning neighbourhoods and census neighbourhoods.

The output of this pilot will now form the future releases of all the Provincial CEEI data CEEI version 2, as such this year the CVRD has both the "classic" and "improved" version at their disposal. The data has been provided to us in ARC GIS format and subsequently provided to our local government partners for inclusion into their climate action planning processes.

Submitted by,

Kate Miller, Manager

Regional Environmental Policy Division

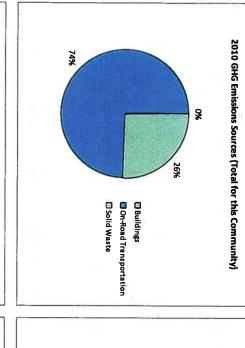
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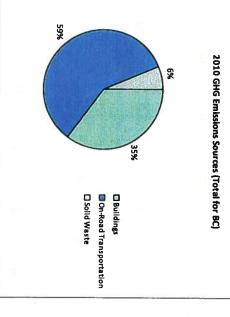
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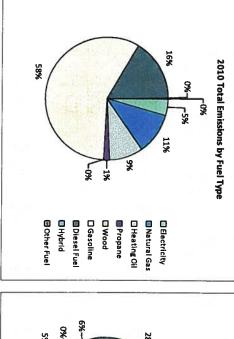


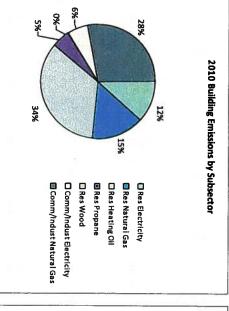
Cowichan Valley Regional District Draft 2010 Community Energy and Emissions Inventory

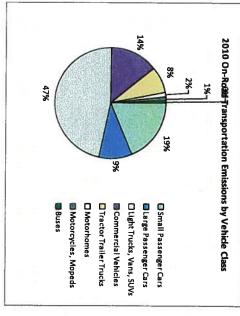
Monitoring and reporting on progress towards greenhouse gas emissions reduction targets













Cowichan Valley Regional District Draft 2010 Community Energy and Emissions Inventory Monitoring and reporting on progress towards greenhouse gas emissions reduction targets

Page 2 of 7 June 19, 2012

Core Items

Totals			Buses	Motorcycles, Mopeds			Motorhomes			Tractor Trailer Trucks				Commercial Vehicles				Light Trucks, Vans, SUVs				Large Passenger Cars				Small Passenger Cars	On-Road Transportation	
	Other Fuel	Diesei Fuel	Gasoline	Gasoline	Other Fuel	Diesel Fuel	Gasoline	Other Fuel	Diesel Fuel	Gasoline	Other Fuel	Diesel Fuel	Gasoline	Hybrid	Other Fuel	Diesel Fuel	Gasoline	Hybrid	Other Fuel	Diesel Fuel	Gasoline	Hybrid	Other Fuel	Diesel Fuel	Gasoline	Hybrid		
64,869	<10	61	46	1,360	16	95	871	40	813	17	19	540	303		257	2,624	27,309		37	243	10,083		410	871	19,304		Connections	
94,484,381 L	10,026 L	65,785 L	43,648 L	1,218,667 L	18,758 L	132,513 נ	873,483 L	2,554 L	3,526,950 L	22,675 L	35,096 L	1,289,111 L	468,251 L		350,785 L	5,532,352 L	46,677,766 L		44,321 L	309,602 L	12,741,054 L		371 L	1,065,514 L	20,055,099 L		Consumption	
14,160	10,463	13,514	13,691	20,725	13,708	13,510	13,678	10,927	23,182		11,375	16,486	12,656		10,016	15,060	14,614		10,847	14,487	13,376		10,883	20,714	12,725		Avg VKT (km)	2007
3,347,820	384	2,520	1,528	42,653	718	5,075	30,572	98	135,082	794	1,344	49,373	16,389		13,435	211,889	1,633,722		1,698	11,858	445,937		14	40,809	701,928		Energy (GJ)	
229,136	15	177	102	2,850	29	357	2,037	4	9,491	53	54	3,469	1,096		537	15,113	111,793		68	845	30,263	250	1	2,910	47,872		C02e (t)	
56,576	<10	76	47	1,272	<10	273	493		580	410	48	2,948	1,878	<10	85	987	23,672	42	<10	159	7,151	162	<10	705	15,947	51	Connections	
94,484,381 L	9,089 L	396,996 L	129,590 L	1,505,376 L	13,550 L	851,345 L	1,167,921 L		8,964,185 €	55,166 L	95,358 L	11,357,685 L	5,333,066 L	9,454 L	155,946 L	2,414,504 L	59,008,538 L	89,292 L	2,634 ₪	181,139 L	12,277,491 L	215,819 L	426 L	1,163,196 L	23,649,048 L	51,730 L	Consumption	
17.237	10,417	19,759	17,311	21,509	15,792	15,792	15,792		43,581	29,878	11,172	21,319	16,745		11,303	14,317	17,483	24,764	12,234	12,431	15,036	23,575		24,358	15,791	20,136	Avg VKT (km)	2010
4.591.410	348	15,205	4,536	52,688	519	32,606	40,877		343,328	1,931	3,652	434,999	186,657	33	5,973	92,476	2,065,299	313	101	6,938	429,712	755	16	44,550	827,717	181	Energy (GJ)	
313.645	14	1,068	305	3,517	21	2,290	2,730		24,122	130	146	30,563	12,537	22	239	6,582	140,710	212	4	494	28,303	445	1	3,177	55,892	121	C02e (t)	



Page 3 of 7 June 19, 2012

Draft 2010 Community Energy and Emissions Inventory

				2007				2010	
Buildings		Connections	Consumption	Energy (GJ)	C02e (t)	Connections	Consumption	Energy (GJ)	¥4.
Residential	Wood	N/A	648,804 GJ	648,804	240	N/A	628,066 GJ	628,066	
	Heating Oil	N/A	541,385 GJ	541,385	38,162	N/A	524,081 GJ	524,081	
	Propane	N/A	93,345 GJ	93,345	5,695	N/A	90,362 GJ	90,362	
	Natural Gas	5,823	307,207 GJ	307,207	15,668	6,792	310,128 GJ	310,128	
	Electricity	33,690	528,140,280 kWh	1,901,303	13,028	35,262	534,394,359 kWh	1,923,818	
Commercial/Small-Medium Industrial	Natural Gas	936	459,762 GJ	459,762	23,448	759	605,868 GJ	605,868	
	Electricity	4,252	248,783,669 kWh	895,620	6,137	4,116	255,389,275 kWh	919,401	
Totals		44,701		4,847,426	102,378	46,929	200	5,001,724	

Memo Items

Totals

Solid Waste

Community Solid Waste

Solid Waste

Connections

Consumption 27,948 t

Energy (GJ) N/A

5,517 **5,517**

Connections 0

> Consumption 27,139 t

Energy (GJ)

C02e (t)

2010

2007

0

			20	2007		2010	
Buildings		Connections	Consumption	Energy (GJ) COZe (t	e (t) Connections	Consumation	Favor (CI)
Large Industrial	Natural Gas	1	withheld		_		mail (m)
	Electricity	6	withheld	0	0	withheld kWh	5
Totals		7			o		
			2007	07		2010	
Agriculture		Connections	Consumption	Energy (GJ) C02e (t)	-	Connections Consumption	Enarey (GI)
Enteric Fermentation	Methane	15,297	878 t		-		man by (and)
Totals		15,297		18	18,438 0		



Draft 2010 Community Energy and Emissions Inventory

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Monitoring and reporting on progress towards greenhouse gas emissions reduction targets

Totals	Settlement	Agriculture	Land-use	
	Deforestation	Deforestation	Land-use Change - Deforestation	
43	29	14	Connections	
	0 ha	0 ha	Connections Consumption	2007
	0	0	Energy (GJ)	7
35,465	26,128	9,337	C02e (t)	
0			Connections	
			Connections Consumption	
			A TOTAL STATE	2010
			Energy (GJ)	
			C02e (t)	

Totals for Transportation, Buildings and Solid Waste

VICE TO THE PARTY OF THE PARTY	2007 (Pol	2007 (Population: 79,558)		2010 (Po	2010 (Population: 82,871)	Signature No.
Fuel Type	Consumption	Energy (GJ)	C02e (t)	Consumption	Energy (GJ)	C02e (t)
Hybrid	0١	0		366,295 ∟	1,282	800
Gasoline	82,100,643 L	2,873,523	196,066	103,126,196 L	3,609,417	244,124
Diesel Fuel	11,921,827 L	456,606	32,362	25,329,050 L	970,102	68,296
Other Fuel	461,911 L	17,691	708	277,003 L	10,609	425
Wood	648,804 GJ	648,804	240	628,066 GJ	628,066	232
Heating Oil	541,385 GJ	541,385	38,162	524,081 GJ	524,081	36,942
Propane	93,345 GJ	93,345	5,695	90,362 GJ	90,362	5,513
Natural Gas	766,969 GJ	766,969	39,116	915,996 GJ	915,996	46,717
Electricity	776,923,949 kWh	2,796,923	19,165	789,783,634 kWh	2,843,219	19,482
Solid Waste	27,948 t	0	5,517	27,139 t	0	0
Grand Totals	•	8,195,246	337,031		9,593,134	422,531



Draft 2010 Community Energy and Emissions Inventory

June 19, 2012

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Monitoring and reporting on progress towards greenhouse gas emissions reduction targets

Supporting Indicators

2014). In the interim, we are including the same supporting indicator data that was provided in the 2007 reports. Feedback is requested on all supporting indicators; please contact us directly at No new supporting indicator data have been provided in the 2010 reports. Work is currently underway to produce a complete second round of data for the indicators below in the 2012 reports (available in TEEIRPT@gov.bc.ca

Housing Type - Private dwellings by structural type

Housing type is important for reducing building-related GHG emissions and energy consumption. A trend toward fewer single family dwellings indicates an increase in residential density, which is known to reduce transportation-related GHG emissions.

> emissions. More compact, complete, connected communities should see an increase in the An increase in the number of people choosing to walk, cycle and use transit reduces GHG Commute to Work - Employed labour force - by mode of commute

use of these transportation modes.

	1996		2001		2006	
	Units	*	Units	×	Units	*
Single Detached House	20,760	43	21,940	76	23,200	74
Semi-Detached House	905	2	900	ω	1,240	4
Row House	930	2	1,240	4	1,335	4
Apartment, Duplex	580	1	480	2	865	ω
Apartment, 5 storeys or higher	10	0	15	0	10	0
Apartment, under 5 storeys	2,640	6	2,830	10	3,240	10
Other Single Attached House	55	0	140	0	130	0
Movable Dwelling	1,320	w	1,300	s	1,200	4

Residential Density

Bicycle

Motorcycle

1,705 310 40 20 395

Walked

Public Transit

Car, Truck, Van as Passenger

Car, Truck, Van as Driver

22,145

23,165 Units

25,685

2,825

Units 1996

2001

2006

2,005 215

1,705 1,990 170 265 45

340 2,050 300 105 25 425

0 0 1 6 1 9

Other Method Taxicab

in fewer transportation-related GHG emissions. There are many Increasing residential densities is known to reduce vehicle use resulting additional benefits from more compact development.

	2009	
	Units	%
National Parks	5,582	2
Provincial Parks / Protected Areas	18,882	(A)
Local Parks	1,217	0
Agricultural Land Reserve	18,999	Un.
Other land use	304,848	87
Total Parks and Protected Area	25,682	7
Total Land Area	3/0 570	3

Net of Crown land, parks, Indian Reserves, water features, airports, ALR, waste disposal sit

Parks and protected greenspaces are important for the **Parks and Protected Greenspace**

protection and enhancement of community carbon sinks.

	2009	Ī
	Units	%
National Parks	5,582	
Provincial Parks / Protected Areas	18,882	LO.
Local Parks	1,217	0
Agricultural Land Reserve	18,999	Ln
Other land use	304,848	87
Total Parks and Protected Area	25,682	7
Total Land Area	349,529	18

Other land use

304,848 349,529 25,682 18,999 18,882 5,582 Units

87

8

1,217

Provincial Parks / Protected Areas

National Parks

Total Parks and Protected Area Agricultural Land Reserve

Total Land Area

Total is net of Indian Reserves
 Quantity of parkland may be underestimated



Draft 2010 Community Energy and Emissions Inventory

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Monitoring and reporting on progress towards greenhouse gas emissions reduction targets

Supporting Indicators Under Consideration

Work is currently underway to produce a second round of supporting indicators with new data for the 2012 reports (available in 2014). These reports will include new data for the five supporting indicators included in the 2007 and 2010 Reports:

- Housing Type: Private dwellings by structural type
- Commute to Work: Employed labour force by mode of commute
- Commute Distance
- **Residential Density**
- Parks and Protected Greenspace

And in addition, for the 2012 reports we are working to be able to include:

- Proximity to Transit
- Building Energy Intensity
- Building Floor Space
- **Waste Diversion**

We are continuing to work towards reporting on even more supporting indicators in the future including:

- Proximity to Services (e.g destinations such as grocery store, school, other retail etc.)
- Transit Ridership
- Water Use
- Impervious Surface Cover: % change in impervious surface cover
- Tree Canopy Cover: % change in tree canopy cover
- District Energy: # and energy output (e.g. buildings connected, energy consumed in GJ or kWh) of district energy systems by energy type e.g. renewable or non-renewable)
- On-Site Renewable Energy: # and energy output (in GJ or kWh) from households producing and/or consuming on-site renewable heat (e.g. biomass, solar thermal, geo-exchange) and/or electrical (e.g. solar photovoltaic, small wind, small scale hydro) energy
- Energy Recovery from waste energy (GJ or kWh) recovered from waste (e.g. from landfill gas, sewage treatment, industrial operations, farm)

Please give us feedback by contacting us directly at CEEIRPT@gov.bc.ca

Many local governments have been undertaking a significant amount of climate action in both the corporate and community-wide spheres, as demonstrated in both the public reports from the Climate Action Revenue Incentive Program (CARIP) http://www.cscd.gov.bc.ca/lgd/greencommunities/carip.htm, and on the http://toolkit.bc.ca website. These two resources may be helpful to those who are interested in learning from other BC local governments. The toolkit also contains additional information and resources including decision-support/planning frameworks and tools for undertaking actions to reduce GHG emissions and energy consumption.



Draft 2010 Community Energy and Emissions Inventory

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Monitoring and reporting on progress towards greenhouse gas emissions reduction targets

This is your local government's 2010 Community Energy and Emissions Inventory (CEEI) Report

What is a CEEI Report?

emissions as well as supporting indicators every two years. CEEI Reports are one of the many resources available through the Climate Action Toolkit (http://www.toolkit.bc.ca), a web-based service provided CEEI Reports are a result of a multi-agency effort to provide a province-wide solution to assist local governments in BC to track and report on community-wide energy consumption and greenhouse gas (GHG) through the ongoing collaboration between UBCM and the Province.

The 2010 CEEI reports are offered in DRAFT at this time

We encourage feedback from our communities across the province as we continue to review the data through the summer of 2012. Should you have any questions or concerns, please take the time to contact us directly at CEEIRPT@gov.bc.ca

Why does my local government need a CEEI Report?

A community energy and GHG emissions inventory can be a valuable tool that helps local governments plan and implement GHG and energy management strategies, while at the same time strengthening broader sustainability planning at the local level. CEEI reports fulfill local governments' Climate Action Charter commitment to measure and report their community's GHG emissions profile, establish a base **Growth Strategy objectives.** government members of the Federation of Canadian Municipalities' (FCM's) Partners in Climate Protection (PCP) program, as well as supporting local government efforts to monitor progress towards Regional year inventory for local governments to consider as they develop targets, policies, and actions related to BC's Local Government Act requirements, fulfill Milestone One requirements for those local

A first in North America!

CEEI is a first in North America and a first step for BC communities. The 2010 CEEI Reports are based on best available province-wide data. The accuracy and detail of CEEI reports will continue to improve to heating oil, propane and wood use, breaking out small from large industrial buildings, including updated land-use change and new agricultural sectors as 'memo items' meet increasing local and provincial government information needs. Improvements have been made from the original draft 2007 CEEI Reports posted in Spring 2009. These include estimates for residential

For More Information

The full list of all BC local government 2010 CEEI Reports, User Guide, Technical Methods and Guidance Document, and additional information on the Supporting Indicators are available at: http://www.cd.gov.bc.ca/lgd/greencommunities/targets.htm http://www.env.gov.bc.ca/cas/mitigation/ceel/index.html For guidance on target setting and community actions, go to http://www.toolkit.bc.ca and

Notice to the Reader

This CEE! Report uses information from a variety of sources to estimate GHG emissions. While the methodologies, assumptions and data used are intended to provide reasonable estimates of greenhouse gas emissions, the information presented in this report may not be appropriate for all purposes. The Province of BC and the data providers do not provide any warranty to the user or guarantee the accuracy or reliability of the data contained in this report. The user accepts responsibility for the ultimate use of such data. We need your help to make these reports better,



R13

STAFF REPORT

ENGINEERING AND ENVIRONMENTAL SERVICES COMMITTEE MEETING OF JULY 25, 2012

DATE:

July 17, 2012

File No.

FROM:

Kate Miller, M.Sc. MCIP, LEED AP, Manager, Regional Environmental Policy Division

SUBJECT:

Plan2Adapt Website and Tool

Recommendation/Action: For Information only.

Relation to the Corporate Strategic Plan:

This initiative is an action item under the *Lead by Example and Protect the Environment from Harm* corporate strategic objectives, which identify the need to develop community climate change mitigation and adaptation plans and strategies. This activity provides key information and tools necessary to further those objectives.

Financial Impact: Not at this time, associated staff time was approved in the 2012 Budget.

Background:

Climate change and adaptation are complex issues and have potential effects at multiple scales. This includes differing consequences based on both geography and seasonal concerns over time. Discussions of climate adaption are often general in nature and specific guidance and information regarding local impacts is challenging to communicate and plan for effectively. Climate change impacts do not affect every region of British Columbia in the same way, nor does it affect our region uniformly. As a step towards the development of a specific and results-oriented climate adaptation plan for the region, staff participated with Pacific Climate Impacts Consortium, as identified emerging experts at a local and regional scale, in the development of three tools that can be used to guide and inform local policy development and planning.

Plan 2 Adapt Tool

An accessible and easy to use web interface that generates maps, plots and data describing projected future climate conditions for all regions in BC. It is designed to help assess climate change in our region based on a standard set of climate model projections for three time periods, either annually or by season. The scale of this tool can be utilized at the regional district scale. This tool is useful for public presentations or general regional planning purposes. See attached Appendix A for example screen shots of a simple Plan2Adapt interface.

Regional Analysis Tool

This web based tool generates maps, plots and data describing projected future climate conditions for the Pacific and Yukon Region. It uses more than 15 Global Climate Model (GCM) and emissions scenario combinations provided by the Intergovernmental Panel on Climate Change (IPCC). With a more complex user interface and greater number of configurable options, the Regional Analysis Tool is designed to serve the needs of those involved in climate modelling and impact studies, such as the CVRD in future analysis of infrastructure impacts.

The Regional Analysis Tool allows you to:

- select from a set of pre-defined regions and generate maps, plots and data pertaining to that region for a specific time horizon (e.g., 2050s, 2080s, etc.);
- define your own custom region and generate maps, plots, and data pertaining to the area you specify;
- generate maps showing projected changes for a specific region under one or more GCMs, with included grid boxes highlighted;
- acquire metadata from a specific region from all of the selected GCMs, with the option of displaying percentiles across selected GCMs;
- · compare specific climate variables for each GCM ensemble;
- ` plot how climate variables change over time for each GCM ensemble; and
- display box plots for each future climate projection over the GCM ensemble

The ReTooling for Climate Change website

This website is a first stop for elected officials and staff of local governments, First Nations, and anyone else interested in learning about climate change adaptation. Browse these pages for some of the latest information on climate change, local impacts and adaptation planning. The site includes links to tools and resources including key material from across North America and around the globe. The idea behind the ReTooling site is to save you time in preparing your own community for climate change and integrating adaptation into local planning and decision-making.

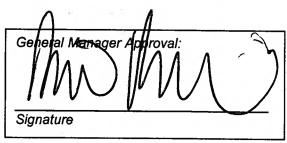
Submitted by

Kate Miller, Manager

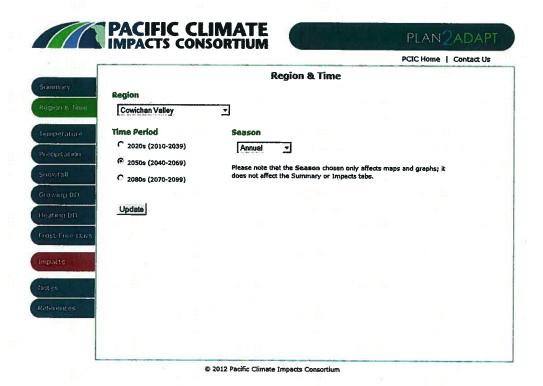
Regional Environmental Policy Division

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Appendix A. Example screen shots of Plan2Adapt web interface



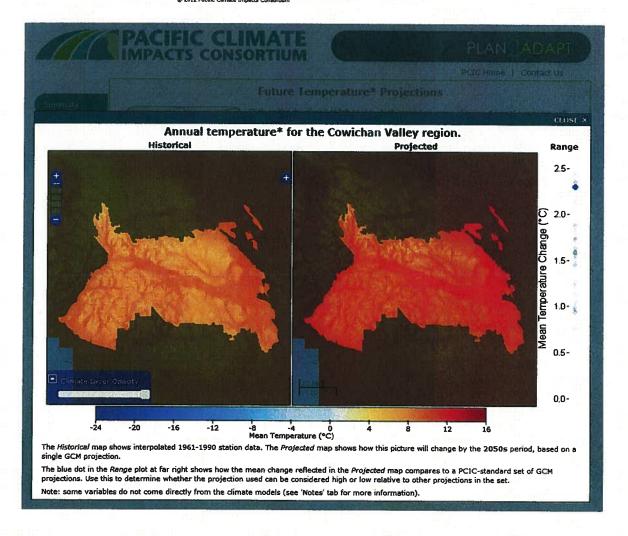
PACIFIC CLIMATE IMPACTS CONSORTIUM

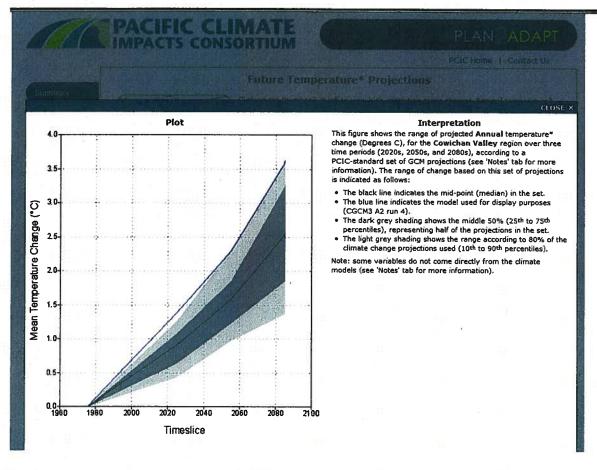
PLAN PADAPT

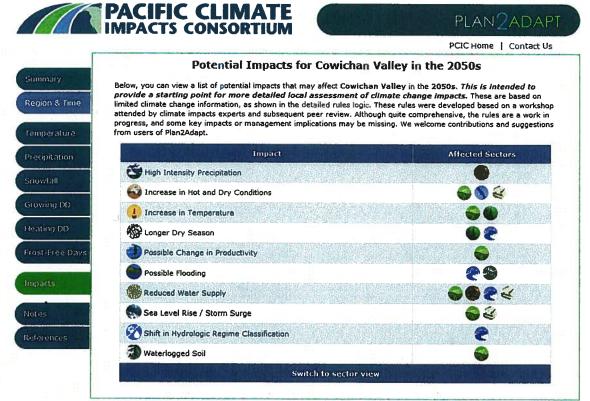
PCIC Home ! Contact Us Summary of Climate Change for Cowichan Valley in the 2050s Projected Change from 1961-1990 Baseline Climate Variable Ensemble Median Mean Temperature (°C) Annual +1.6 °C +1.0 °C to +2.3 °C Annual +5% -2% to +12% Precipitation (%) Summer -28% to +1% Winter +5% -5% to +16% Winter -39% -59% to -21% Snowfall* (%) Spring -53% Growing Degree Days* (degree days) Annual +430 degree days +246 to +628 degree days Heating Degree Days* (degree days) -548 degree days Annual -772 to -321 degree days Frost-Free Days* (days) Annual +16 days +11 to +24 days The table above shows projected changes in average (mean) temperature, predipitation and several derived climate variables from the baseline historical period (1961-1990) to the 2050s for the Cowlchan Valley region. The ensemble median is a mid-point value, chosen from a PCIC standard set of Global Climate Model (GCM) projections (see the 'Notes' tab for more information). The range values represent the lowest and highest results within the set. Please note that this summary table does not reflect the 'Season' choice made under the 'Region & Time' tab. However, this setting does affect * These values are derived from temperature and precipitation. Please select the appropriate variable tab for more

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PACIFIC CLIMATE PCIC Home | Contact Us Future Temperature* Projections Click on the thumbnell at left to view high-resolution maps showing Anouse temperature* for the Cowlichan Valley region for both the historical baseline (1961-1990) period and the 2050s period. An accompanying range plot shows the results flustrated in the projected future map compare to a PCIC-standard set of Global Climate Model (GCM) projections (see "Notes" tab for more information). Click to Vicv Click on the thumbnell at left to view a plot showing the range of projected change in Annual temperature* for the Cowlichan Valley region over three future periods (2020s, 2050s, and 2080s) according to a PCIC-standard set of Global Climate Model (GCM) projections (see "Notes" tab for more information). The data used for the future projections are also available for download as a CSV (commesceparated values) file that can be imported into a spreadsheat program. * Temperature refers to the average of the nighttime low (minimum temperature) and the daytime high (maximum temperature) temperature). **Properature refers to the average of the nighttime low (minimum temperature) and the daytime high (maximum temperature).







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R14

STAFF REPORT

ENGINEERING & ENVIRONMENTAL SERVICES COMMITTEE MEETING OF JULY 25, 2012

DATE:

July 19, 2012

FILE NO:

5600-30-YWS/01

FROM:

Dave Leitch, Manager, Water Management

SUBJECT: Youbou Water System - Sa-Seen-Os Crescent - Lots 50 - 54 Connection History

Recommendation/Action:

That a refund of 2009, 2012 and 2011 Youbou Water System parcel tax and debt payments not be granted to Mr. Ian Graeme, owner of Lots 50, 51, 52 and 53 on Sa-Seen-Os Crescent in Electoral Area I.

Relation to the Corporate Strategic Plan:

Financial Impact:

Mr. Ian Graeme, owner of Lots 50, 51, 52 and 53 on Sa-Seen-Os Crescent in Youbou has requested a refund in Parcel Taxes and debt payments as properties are not yet connected to the Youbou Water System. Any refund to these residents would be paid by the users of the Youbou Water System.

Background:

In 2006, the CVRD commended work on the "Integration of Youbou Water Systems". The work included installing approximately 6 km of new watermain, reservoir upgrades, a PRV/booster station and development of a new well source. Ultimately the project connected the Creekside Water System to the Youbou Water System and several privately operated utilities in between to make up a collective service area of approximately 600 homes.

As part of this project, a new watermain was installed along Sa-Seen-Os Road, extending onto Sa-Seen-Os Crescent (see attached map). Servicing Lots 49-54 on Sa-Seen-Os Crescent presented a unique challenge as the properties have no frontage along Sa-Seen-Os Crescent (except Lot 54 that has a narrow corner fronting the road). Due to the properties essentially being land-locked, a watermain extension was needed to service the lots and to be installed over a shared common driveway along a narrow strip of land. As a result, a Statutory Right-of-Way along Lot 63, (owned by Mr. lan Graeme) and a part of Lot 54 (owned by Mr. Larry Green) was required prior to the CVRD being able to install any works to service these properties.

As the construction works for this integration project had already begun, the timeline for establishing the Right of Way was very tight, if the Sa-Seen-Os water line was going to be installed at the same time all the other works were being done.

Discussions with Mr. Graeme were on going in late 2006 regarding the Right of Way and the CVRD's standard charge terms, but an agreement was not able to be completed before the maior construction works had finished, therefore the CVRD would have to come back at a later date to install the water line.

Between November 2006 and November 2007, the CVRD's project engineer Brent Schmitt, exchanged a number of phone calls and e-mails with Mr. Graeme in regards to the CVRD's Standard Charge Terms, liabilities, who would be responsible for future driveway repairs and the general logistics of how the properties would be serviced.

Due to the number of concerns Mr. Graeme had in regards to the Right of Way and the resulting lack of progress being made, Brent Schmitt sent an e-mail to Mr. Graeme in September 2007 asking him if he was still interested in proceeding with granting the CVRD a Right of Way to which Mr. Graeme replied that he did support proceeding, but in November 2007 he sent another e-mail to Mr. Schmitt stating that there was no urgency to complete this from his perspective.

At the time of construction, there were five properties affected by this servicing challenge. Although two of the properties were and still are vacant, the three other properties have homes on them and draw their drinking water from the lake. As a result of this and Mr. Graeme's statement that there was no urgency to complete the Right of Way, there was no work completed nor any correspondence between Mr. Schmitt and Mr. Graeme until May 2008, when Mr. Graeme called for an update on the servicing of the five properties. Subsequent to talking with Mr. Graeme, Mr. Schmitt informed him that he was leaving the CVRD, but that he would initiate the survey, which was completed in August 2008.

Users of the "integrated area" were not charged a parcel tax in 2008 as the CVRD did not have the system operational in 2007.

The CVRD has no record of any correspondence with Mr. Graeme again until May 2009 when the CVRD received a request for a water service from Mr. McFarlane on Lot 49, as he was constructing a new house. In order to service Lot 49 properly, the CVRD needed to extend the water line past the frontage of Mr. McFarlane's lot. As there was still no Right of Way in place, the CVRD contacted both Mr. Greene and Mr. Graeme to obtain their approved to dig a couple of test holes on their property, (the future Right of Way), to determine the ground conditions. Both parties agreed to this and were aware that in order to install the watermain on their property we would need the Right of Way in place.

The Right of Way documents at this time were again not requested by either Mr. Greene and/or Mr. Graeme and because the owner of Lot 49 needed the water service quickly, a temporary service was installed that did not encroach onto Mr. Graeme's property.

Between 2009 and 2010, CVRD staff exchanged a couple of telephone conversations with Mr. Graeme, requesting that he and/or any of the other property owners on Sa-Seen-Os Crescent provide the CVRD with adequate notice for water supply as the Right of Way was still not in place and this would need to be completed before any construction works began.

To this point, getting the Right of Way in place and extending the waterline was not made a priority since none of the property owners, including Mr. Graeme, had requested a water service.

In February 2010 Mr. Graeme emailed CVRD staff asking for a status update on when the subject properties would receive servicing. He indicated in his email that "Larry and I would like to get this wrapped up before the summer season". Staff responded to Mr. Graeme on May 10, 2010, to which Mr. Graeme replied one month later stating that he agreed with the proposed Standard Charge Terms, but he would not like the construction done during the summer months due to the higher recreational usage by his family.

As it was the desire of Mr. Graeme to not have the work done in the summer months, the only remaining option was to prepare and send both Mr. Greene and Mr. Graeme the Right of Way agreement in the fall of 2010 and plan to have the servicing work completed in the spring of 2011. Although at this time the CVRD had yet to receive a request from Mr. Greene to have a Right of Way registered against his property and provide a water service to his property.

On July 2, 2010 Mr. Graeme sent a letter to the CVRD asking for a refund of the 2009 (\$200.70) and 2010 (\$235.88) parcel tax and the 2009 (\$190.78) and 2010 (\$178.62) Central Youbou Water debt repayment totaling \$1,011.33 for each lot (50, 51, 52, and 53) and to discontinue future levies until the lots were serviced. If the CVRD refunds past parcel taxes and/or debt payments, the money would come from the existing users of the Youbou Water System.

It should be noted that, of the four lots, Mr. Graeme is asking for a refund for two lots that do not have houses on them and therefore have had no use for a water service. Mr. Graeme has never indicated to CVRD staff that he has or requires a water service for multiple homes.

The debt payment refund Mr. Graeme is requesting is a payment all properties within the Central Youbou Debt Service Area pay for their contribution to the estimated \$2,200,000 worth of work that was completed to upgrade and integrated the water systems. Approval for the borrowing of these funds was gained through an AAP and repayment of the debt payments is not contingent upon connection to the system. There is still approximately 50 homes in the Youbou Water System service area that have not connected to the community water system, but contribute to the debt.

Parcel taxes as well are paid by all properties in the service area, whether they are connected to the system or not. Parcel taxes help pay for the ongoing maintenance and support of the infrastructure. Payment of the parcel taxes is also not contingent on connection to the water system. It costs significant money to keep the infrastructure in a continuously healthy state and money from the collection of parcel taxes keeps the system in that condition. Properties within the service area, that are not connected to the water system, but are paying parcel taxes receive the benefit of reduced home insurance premiums (estimated at 40% less) due having a hydrant located within 300 metres of their home and a typical increase in property value due to their accessibility to a water system.

In the summer of 2011, the legal documents for the Statutory-Right-Way were prepared and forwarded to Mr. Graeme and Mr. Green in September 2011 for signing. The signed documents were not returned to the CVRD by both parties until February 2012.

The anticipated cost to supply water to these five properties is \$20,000, which was included in the 2012 budget to be paid by all the users of the Youbou Water System. There is no direct capital charge to these five properties. Since the approval of the budget in the spring of 2012, staff have completed the engineering survey and design work, sent letters to the property owners regarding details of the construction and servicing and have construction scheduled for late August, early September of this year.

Reviewed by: Division Manager:

Submitted by,

Dave Leitch, Manager,

Water Management Division

DL:jlb

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